**Yee &
Associates, P.C.**

4100 Alpha Road
Suite 1100
Dallas, Texas 75244

Main No. (972) 385-8777
Facsimile (972) 385-7766

Facsimile Cover Sheet

To: Commissioner for Patents for **Examiner Michael Bekerman Group Art Unit 3622**	Facsimile No.: **571/273-8300**
From: Michele Morrow Legal Assistant to Francis Lammes	No. of Pages Including Cover Sheet: **25**

Message:

Enclosed herewith:

- Transmittal of Appeal Brief; and
- Appeal Brief.

Re: Application No. 09/766,357

Attorney Docket No: RSW920000110US1

Date: Monday, June 19, 2006

Please contact us at (972) 385-8777 if you do not receive all pages indicated above or experience any difficulty in receiving this facsimile.	*This Facsimile is intended only for the use of the addressee and, if the addressee is a client or their agent, contains privileged and confidential information. If you are not the intended recipient of this facsimile, you have received this facsimile inadvertently and in error. Any review, dissemination, distribution, or copying is strictly prohibited. If you received this facsimile in error, please notify us by telephone and return the facsimile to us immediately.*

PLEASE CONFIRM RECEIPT OF THIS TRANSMISSION BY FAXING A CONFIRMATION TO 972-385-7766.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Moore**	§	Group Art Unit: **3622**
	§	
Serial No.: **09/766,357**	§	Examiner: **Bekerman, Michael**
	§	
Filed: **January 19, 2001**	§	Attorney Docket No.: **RSW920000110US1**
	§	
For: **Automated and Optimized Mass**	§	
Customization of Direct Marketing	§	
Materials	§	

37945

PATENT TRADEMARK OFFICE
CUSTOMER NUMBER

Certificate of Transmission Under 37 C.F.R. § 1.8(a)

I hereby certify this correspondence is being transmitted via facsimile to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, facsimile number (571) 273-8300 on June 19, 2006.

By: _Michele Morrow_
    Michele Morrow

TRANSMITTAL OF APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:
ENCLOSED HEREWITH:

- Appeal Brief (37 C.F.R. 41.37)

A fee of $500.00 is required for filing an Appeal Brief. Please charge this fee to IBM Corporation Deposit Account No. 09-0457. No additional fees are believed to be necessary. If, however, any additional fees are required, I authorize the Commissioner to charge these fees which may be required to IBM Corporation Deposit Account No. 09-0457. No extension of time is believed to be necessary. If, however, an extension of time is required, the extension is requested, and I authorize the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0457.

Respectfully submitted,
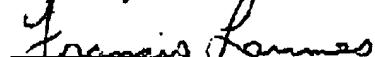
Francis Lammes
Francis Lammes
Registration No. 55,353
AGENT FOR APPLICANT

Duke W. Yee
Registration No. 34,285
YEE & ASSOCIATES, P.C.
P.O. Box 802333
Dallas, Texas 75380
(972) 385-8777
ATTORNEY FOR APPLICANT

Docket No. RSW920000110US1   *PATENT*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Moore**	§	
	§	Group Art Unit: **3622**
Serial No. **09/766,357**	§	
	§	Examiner: **Bekerman, Michael**
Filed: **January 19, 2001**	§	
	§	
For: **Automated and Optimized Mass**	§	
Customization of Direct Marketing	§	
Materials		

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

37945
PATENT TRADEMARK OFFICE
CUSTOMER NUMBER

APPEAL BRIEF (37 C.F.R. 41.37)

This brief is in furtherance of the Notice of Appeal, filed in this case on April 25, 2006.

A fee of $500.00 is required for filing an Appeal Brief. Please charge this fee to IBM Corporation Deposit Account No. 09-0457. No additional fees are believed to be necessary. If, however, any additional fees are required, I authorize the Commissioner to charge these fees which may be required to IBM Corporation Deposit Account No. 09-0457. No extension of time is believed to be necessary. If, however, an extension of time is required, the extension is requested, and I authorize the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0457.

(Appeal Brief Page 1 of 23)
Moore – 09/766,357

REAL PARTY IN INTEREST

The real party in interest in this appeal is the following party: International Business Machines Corporation.

/

RELATED APPEALS AND INTERFERENCES

With respect to other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal, there are no such appeals or interferences.

STATUS OF CLAIMS

A.   TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 1-4, 8-13, 17-22, 26, and 27.

B.   STATUS OF ALL THE CLAIMS IN APPLICATION

1. Claims canceled: 5-7, 14-16, and 23-25.
2. Claims withdrawn from consideration but not canceled: NONE.
3. Claims pending: 1-4, 8-13, 17-22, 26, and 27.
4. Claims allowed: NONE.
5. Claims rejected: 1-4, 8-13, 17-22, 26, and 27.
6. Claims objected to: NONE.

C.   CLAIMS ON APPEAL

The claims on appeal are: 1-4, 8-13, 17-22, 26, and 27.

STATUS OF AMENDMENTS

There are no amendments after the final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

Independent claims 1, 10, and 19:

The present invention provides a computer implemented method for customizing direct marketing materials. (Specification, page 11, lines 1-4) The present invention develops models to predict customer purchases. (Specification, page 11, lines 4-14) The present invention scores customers for each predictive model. (Specification, page 11, lines 14-17) The present invention determines specific layout areas. (Specification, page 11, line 18, to page 12, line 2) The present invention determines where a particular product can be placed in the layout areas. (Specification, page 12, lines 3-19) The present invention uses an optimization model to customize the layout areas for customers, wherein the optimization model used to customize the layout areas is at least one of a transportation model, a network model, or a generalized network model. (Specification, page 12, line 20, to page 13, line 27)

The developing, scoring, determining, and using means recited in independent claim 19, as well as dependent claims 20-22, 26, and 27, may be data processing hardware within clients **108, 110, or 112,** or server **104** in **Figure 1** operating software executed by data processing system **200** of **Figure 2** and performing the steps described in the specification at page 11, line 1, to page 13, line 27, or equivalent. A person having ordinary skill in the art would be able to derive computer instructions on a computer readable medium as recited in independent claim 10, as well as dependent claims 11-13, 17, and 18, given **Figure 4** and the corresponding description at page 11, line 1, to page 13, line 27, or equivalent, without undue experimentation.

Dependent claims 2, 11, and 20:

The present invention determines the maximum and minimum possible sizes for each layout area. (Specification, page 11, lines 18-20)

Dependent claims 3, 12, and 21:

The present invention determines a preference multiplier for each layout area. (Specification, page 11, lines 23-25)

Dependent claims 4, 13, and 22:

The present invention passes the optimization model to a print manager for printing only if the expected profit exceeds the production cost of the customized layout areas. (Specification, page 13, lines 5-10)

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A.   GROUND OF REJECTION (Claims 1, 8-10, 17-19, 26, and 27)

Whether claims 1, 8, 9, 10, 17, 18, 19, 26, and 27 are unpatentable under *35* U.S.C. § 103(a) over Kent (U.S. Patent Publication No. 2002/0040374 A1) (hereinafter *"Kent"*) in view of Cornuejols, et al. (Cornuejols, Gerald and Michael Trick, Quantitative Methods for the Management Sciences: *45-760*, Course Notes, Fall 1998) (hereinafter *"Cornuejols"*).

*Note: The Examiners statement of rejection in the Final Office Action dated March 29, 2006, does not include claims 8, 17, and 26; however, Appellants have referred to the previous Office Action for inclusion of these claims into this rejection.

B.   GROUND OF REJECTION (Claims 2, 11, and 20)

Whether claims 2, 11, and 20 are unpatentable under *35* U.S.C. § 103(a) over Kent (U.S. Patent Publication No. 2002/0040374 A1) in view of Cornuejols, et al. (Cornuejols, Gerald and Michael Trick, Quantitative Methods for the Management Sciences: *45-760*, Course Notes, Fall 1998), and further in view of Mohr et al. (U.S. Patent No. 6,826,727 B1) (hereinafter *"Mohr"*).

C.   GROUND OF REJECTION (Claims 3, 12, and 21)

Whether claims 3, 12, and 21 are unpatentable under 35 U.S.C. § 103(a) over Kent (U.S. Patent Publication No. 2002/0040374 A1) in view of Cornuejols, et al. (Cornuejols, Gerald and Michael Trick, Quantitative Methods for the Management Sciences: 45-760, Course Notes, Fall 1998), and further in view of McCormick et al. (U.S. Patent Publication No. 2002/0059339 A1) (hereinafter *"McCormick"*).

(Appeal Brief Page 8 of 23)
Moore – 09/766,357

PAGE 10/25 * RCVD AT 6/19/2006 5:06:35 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-5/3 * DNIS:2738300 * CSID:972 385 7766 * DURATION (mm-ss):05-22

D.   GROUND OF REJECTION (Claims 4, 13, and 22)

Whether claims 4, 13, and 22 are unpatentable under 35 U.S.C. § 103(a) over Kent (U.S. Patent Publication No. 2002/0040374 Al) in view of Cornuejols, et al. (Cornuejols, Gerald and Michael Trick, Quantitative Methods for the Management Sciences: *45-760,* Course Notes, Fall 1998), and further in view of Dowling ("Breaking the Pagination Rules," Catalog Age, June 1997, 77-79) (hereinafter *"Dowling"),* and Weiss (U.S. Patent No. 6,801,333) (hereinafter *"Weiss").*

ARGUMENT

A.   35 U.S.C. 103, Obviousness, Claims 1, 8-10, 17-19, 26, and 27

Claim 1 is representative of this group and reads as follows:

1.   A computer implemented method for customizing direct marketing materials, comprising:
      developing models to predict customer purchases;
      scoring customers for each predictive model;
      determining specific layout areas;
      determining where a particular product can be placed in the layout areas; and
      using an optimization model to customize the layout areas for customers, wherein the optimization model used to customize the layout areas is at least one of a transportation model, a network model, or a generalized network model.

The Examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under *35* U.S.C. § 103. *In re Fritch,* 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). In this case, the *Kent* and *Cornuejols* do not teach or suggest all of the features asserted to be present by the Examiner. Also, the cited references do not provide any teaching, suggestion, or incentive to combine or modify the teachings in the manner necessary to reach the presently claimed invention.

Kent and *Cornuejols,* taken alone or in combination, fail to teach or suggest an optimization model to customize the layout areas for customers, wherein the optimization model used to customize the layout areas is at least one of a transportation model, a network model, or a generalized network model, as recited in claim 1.

Kent is directed producing a mass distributed publication through the creation of a plurality of subscriber specific versions, includes obtaining subscriber profile information relating to the nature of the subscriber's content preferences. *Kent* selects content items from content databases, based upon the subscriber's content preferences. The Examiner acknowledges that *Kent* does not teach an optimization model to customize the layout areas for customers, wherein the optimization model used to customize the layout areas is at least one of a transportation model, a network model, or a generalized network model. However, the Examiner alleges that *Cornuejols* teaches such features.

"It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art." *In re Hedges*, 228 U.S.P.Q. *685*, 687 (Fed. Cir. 1986). *Cornuejols* is directed to quantitative methods for management sciences and provides for a formal quantitative approach to problem solving. More specifically, the cited sections of *Cornuejols* are directed to network optimization that is a special type of linear programming model (see section 11.1). *Cornuejols* relates a network to consist of points and lines that connect pairs of points (see section 11.2). While the terms "transportation model," "network model," and "generalized network model" may appear in the *Cornuejols* reference. The *Cornuejols* reference is not directed towards and does not suggest customizing direct marketing materials. No teaching, suggestion, or incentive is present to combine the teachings of *Kent* with the teaching of *Cornuejols* in the manner asserted by the Examiner. That is, *Kent* does not teach or suggest an optimization model to customize the layout areas for customers, wherein the optimization model used to customize the layout areas is at least one of a transportation model, a network model, or a generalized network model. *Cornuejols* may teach a transportation model, a network model, and a generalized network model, but this cited reference does not teach or suggest customizing direct marketing materials.

The Examiner alleges that *Kent* acknowledges the availability of multiple optimization programs in paragraph [0077], which reads as follows:

> [0077] The optimization program 48 is designed to optimize the various parameters established in the profile 132 and correlate it to the database content 160 (FIG. 5) when it is time to print the publication. The formation and solution of an optimization problem involves the establishment of evaluation criteria based upon the objectives of the optimization problem, followed by a determination of the optimum values of the controllable or independent parameters that will best satisfy the evaluation criteria. The optimum values are determined by the analytical manipulation of the criterion functions, which relates the effects of the independent parameters on the dependent evaluation criterion parameters. In most optimization programs, there are a number of conflict evaluation criteria and a compromise must be reached through a trade-off process in which relative value judgments are made among the conflict criteria. The main task of the optimization program 48 is to maximize the subscriber's satisfaction by choosing content that best correlates to the user profile 132. Therefore, there are multiple dependent

evaluation criterion parameters, including but not limited to the prioritized list of
content that is desired versus the available content in the content database 160.

In this section, *Kent* merely describes the number of different evaluation criteria that is used by
an optimization program. The evaluation criteria described by *Kent* is based upon the objectives
of the optimization problem. Appellant respectfully submits that *Kent's* evaluation criterion
does not equate a transportation model, a network model, or a generalized network that is used as
an optimization model to customize layout areas.

The Examiner further alleges that *Cornuejols* teaches a copy of instructional notes used
by a professor in a university setting to teach students (those attempting to become skilled in the
art) optimization. The *Cornuejlos* reference states it objectives as:

> Objectives of the Course:
> to provide a formal quantitative approach to problem solving;
> to give an intuition for managerial situations where a quantitative approach is
> appropriate;
> to introduce some widely used quantitative models;
> to introduce software for solving such models.

The specific section of *Cornuejlos* cited by the Examiner is introduced by stating:

> Introduction
> Network optimization is a special type of linear programming model.
> Network models have three main advantages over linear programming:
>
> 1. They can be solved very quickly. Problems whose linear program would
>   have 1000 rows and 30,000 columns can be solved in a matter of seconds.
>   This allows network models to be used in many applications (such as
>   realtime decision making) for which linear programming would be
>   inappropriate.
> 2. They have naturally integer solutions. By recognizing that a problem can
>   be formulated as a network program, it is possible to solve special types of
>   integer programs without resorting to the ineffective and time consuming
>   integer programming algorithms.
> 3. They are intuitive. Network models provide a language for talking about
>   problems that is much more intuitive than the "variables, objective, and
>   constraints" language of linear and integer programming.
>
> Of course these advantages come with a drawback: network models cannot
> formulate the wide range of models that linear and integer programs can.
> However, they occur often enough that they form an important tool for real
> decision making.

In these sections, *Cornuejlos* describes linear quantitative models that are used for problem solving. The specific section of *Cornuejlos* cited by the Examiner describes network optimization as a special type of linear programming model. *Cornuejlos* further describes that network models cannot formulate the wide range of models that linear and integer programs can. As can be seen, *Cornuejlos* is directed to mathematical operations and not toward customizing direct marketing materials. Therefore, Appellants respectfully submit that one of ordinary skill in the art of optimization would not be led to combiné and modify the teachings of *Kent* with the teaching of *Cornuejols* in the manner proposed by the Examiner.

Furthermore, no suggestion or incentive is present in the *Kent* or *Cornuejols* references to modify these references to include such features. The mere fact that a prior art reference can be readily modified does not make the modification obvious unless the prior art suggested the desirability of the modification. *In re Laskowski*, 871 F.2d 115, 10 U.S.P.Q.2d 1397 (Fed. Cir. 1989) and also *see In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992) and *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1993). The Examiner may not merely state that the modification would have been obvious to one of ordinary skill in the art without pointing out in the prior art a suggestion of the desirability of the proposed modification.

In this case, no teaching or suggestion is present in *Kent* and *Cornuejols*, either alone or in combination, to teach or suggest the needed modifications. That is, no teaching or suggestion is present in either reference that a problem exists for which using an optimization model to customize the layout areas for customers, wherein the optimization model used to customize the layout areas is at least one of a transportation model, a network model, or a generalized network model, is a solution. To the contrary, *Kent* only teaches producing mass distributed publication through the creation of a plurality of subscriber specific versions, which is a one-to-one model. *Cornuejols* teaches a formal quantitative approach to problem solving. Neither reference recognizes a need to perform the features, or similar features, as recited in claims 1, 10, and 19.

Moreover, neither *Kent* nor *Cornuejols* teaches or suggests the desirability of incorporating the subject matter of the other when these cited references are considered as a whole by one of ordinary skill in the art. That is, there is no motivation offered in either reference for the alleged combination. The Examiner alleges that the motivation for the combination is "to advantageously provide a quick and intuitive approach to customizing a

layout *(Cornuejols* at § 11.1)." As discussed above, *Cornuejols* is directed to network optimization that is a special type of linear programming model, which *Cornuejols* provides an exemplary network of a phone network. Thus, the only teaching or suggestion to even attempt the alleged combination is based on a prior knowledge of Appellant's claimed invention thereby constituting impermissible hindsight reconstruction using Appellant's own disclosure as a guide.

One of ordinary skill in the art, being presented only with *Kent* and *Cornuejols*, and without having a prior knowledge of Appellant's claimed invention, would not have found it obvious to combine and modify *Kent* and *Cornuejols* to arrive at Appellant's claimed invention. To the contrary, even if one were somehow motivated to combine *Kent* and *Cornuejols*, and it were somehow possible to combine the two systems, the result would not be the invention, as recited in claims 1, 10, and 19. The result would be removing an entire user environment using a well known element.

Thus, *Kent* and *Cornuejols*, taken alone or in combination, fail to teach or suggest all of the features in independent claims 1, 10, and 19. At least by virtue of their dependency on claims 1, 10, and 19, the specific features of claims 2-4,8,9, 11-13, 17, 18, 20-22, 26, and 27 are not taught or suggested by *Kent* and *Cornuejols*, either alone or in combination. Accordingly, Appellants respectfully request that the rejection of claims 1, 8, 9, 10, 17, 18, 19, 26, and 27 under *35* U.S.C. § 103 not be sustained.

B.   35 U.S.C. 103, Obviousness, Claims 2, 11, and 20

Claim 2 is a representative claim of the group and reads as follows:

2.   The computer implemented method according to claim 1, wherein the step of determining specific layout areas further comprises determining the maximum and minimum possible sizes for each layout area.

Claims 2, 11, and 20 are dependent on independent claim 1, 10, and 19, thus, these claims distinguish over *Kent* and *Cornuejols* for at least the reasons noted above with regards to claims 1, 10, and 19. Moreover, *Mohr* does not provide for the deficiencies of *Kent* and *Cornuejols* and thus, any alleged combination of *Kent, Cornuejols,* and *Mohr* would not be sufficient to reject claims 1, 10, and 19 or claims 2, 11, and 20 by virtue of its dependency. *Mohr* provides for a computerized system that lays out document templates represented as a tree

(Appeal Brief Page 14 of 23)
Moore – 09/766,357

PAGE 16/25 * RCVD AT 6/19/2006 5:06:35 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-5/3 * DNIS:2738300 * CSID:972 385 7766 * DURATION (mm-ss):05-22

of text and shape elements, including variable elements. The user *of Mohr* can define a shape element to have a maximize or minimize property in one or more dimensions. While *Mohr* may teach a user defining a maximum and minimum property for the layout area, one of ordinary skill in the art, being presented only with *Kent, Cornuejols,* and *Mohr* and without having a prior knowledge of Appellant's claimed invention, would not have found it obvious to combine and modify *Kent* and *Cornuejols* with *Mohr* to arrive at Appellant's claimed invention. That is, *Mohr* does not teach or suggest an optimization model to customize the layout areas for customers, wherein the optimization model that is used to customize the layout areas is at least one of a transportation model, a network model, or a generalized network model. Accordingly, Appellants respectfully request that the rejection of claims 2, 11, and 20 under *35* U.S.C. § 103 not be sustained.

C.   35 U.S.C. 103, Obviousness, Claims 3, 12, and 21

Claim 3 is a representative claim of the group and reads as follows:

3.   The computer implemented method according to claim 1, wherein the step of determining specific layout areas further comprises determining a preference multiplier for each layout area.

Claims 3, 12, and 21 are dependent on independent claim 1, 10, and 19, thus, these claims distinguish over *Kent* and *Cornuejols* for at least the reasons noted above with regards to claims 1, 10, and 19. Moreover, *McCormick* does not provide for the deficiencies of *Kent* and *Cornuejols* and thus, any alleged combination of *Kent, Cornuejols,* and *McCormick* would not be sufficient to reject claims 1, 10, and 19 or claims 3, 12, and 21 by virtue of its dependency. *McCormick* provides for establishing correlations between the design and content elements of the first document and responses of recipients to those design and content elements. While *McCormick* may teach a correlation of data, one of ordinary skill in the art, being presented only with *Kent, Cornuejols,* and *McCormick* and without having a prior knowledge of Appellant's claimed invention, would not have found it obvious to combine and modify *Kent* and *Cornuejols* with *McCormick* to arrive at Appellant's claimed invention. That is, *McCormick* does not teach or suggest an optimization model to customize the layout areas for customers, wherein the optimization model that is used to customize the layout areas is at least one of a transportation

(Appeal Brief Page 15 of 23)
Moore – 09/766,357

PAGE 17/25 * RCVD AT 6/19/2006 5:06:35 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-5/3 * DNIS:2738300 * CSID:972 385 7766 * DURATION (mm-ss):05-22

model, a network model, or a generalized network model. Accordingly, Appellants respectfully request that the rejection of claims 3, 12, and 21 under 35 U.S.C. § 103 not be sustained.

**D.   35 U.S.C. 103, Obviousness, Claims 4, 13, and 22**

Claim 4 is a representative claim of the group and reads as follows:

4.   The computer implemented method according to claim 1, further comprising passing the optimization model to a print manager for printing only if the expected profit exceeds the production cost of the customized layout areas.

Claims 4, 13, and 22 are dependent on independent claim 1, 10, and 19, thus, these claims distinguish over *Kent* and *Cornuejols* for at least the reasons noted above with regards to claims 1, 10, and 19. Moreover, *Dowling* and *Weiss* do not provide for the deficiencies of *Kent* and *Cornuejols* and thus, any alleged combination of *Kent, Cornuejols, Dowling* and *Weiss* would not be sufficient to reject claims 1, 10, and 19 or claims 4, 13, and 22 by virtue of its dependency. *Dowling* provides for the average price of the items on the page having to be high enough to support the cost of the page. *Weiss* provides for comparing a job quote for a print job with production data for a print job that is related to the job quote. While *Dowling* and *Weiss* may teach comparing cost of a print job to the expected profit from the print job, one of ordinary skill in the art, being presented only with *Kent, Cornuejols, Dowling* and *Weiss* and without having a prior knowledge of Appellant's claimed invention, would not have found it obvious to combine and modify *Kent* and *Cornuejols* with *Dowling* and *Weiss* to arrive at Appellant's claimed invention. That is, *Dowling* and *Weiss* do not teach or suggest an optimization model to customize the layout areas for customers, wherein the optimization model that is used to customize the layout areas is at least one of a transportation model, a network model, or a generalized network model. Accordingly, Appellants respectfully request that the rejection of claims 4, 13, and 22 under 35 U.S.C. § 103 not be sustained.

CONCLUSION

In view of the above, Appellants respectfully submit that claims 1-4, 8-13, 17-22, 26, and 27 are allowable over the cited prior art and that the application is in condition for allowance. Accordingly, Appellants respectfully request the Board of Patent Appeals and Interferences to reverse the rejections set forth in the Final Office Action.
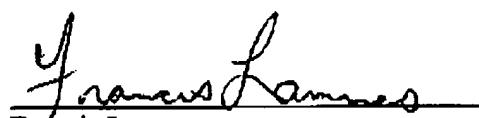
Francis Lammes
Reg. No. 55,353
YEE & ASSOCIATES, P.C.
PO Box 802333
Dallas, TX 75380
(972) 385-8777

CLAIMS APPENDIX

The text of the claims involved in the appeal are:

1.   A computer implemented method for customizing direct marketing materials,

comprising:

    developing models to predict customer purchases;

    scoring customers for each predictive model;

    determining specific layout areas;

    determining where a particular product can be placed in the layout areas; and

    using an optimization model to customize the layout areas for customers, wherein the

optimization model used to customize the layout areas is at least one of a transportation model, a

network model, or a generalized network model.

2.   The computer implemented method according to claim 1, wherein the step of determining

specific layout areas further comprises determining the maximum and minimum possible sizes

for each layout area.

3.   The computer implemented method according to claim 1, wherein the step of determining

specific layout areas further comprises determining a preference multiplier for each layout area.

4.   The computer implemented method according to claim 1, further comprising passing the

optimization model to a print manager for printing only if the expected profit exceeds the

production cost of the customized layout areas.

8.   The computer implemented method according to claim 1, wherein the optimization model used to customize the layout areas is directed at a niche market.

9.   The computer implemented method according to claim 1, wherein the optimization model used to customize the layout areas is directed at individual customers.

10.   A computer program product in a computer readable medium for use in a data processing system for customizing direct marketing materials, the computer program product comprising:

instructions for developing models to predict customer purchases;

instructions for scoring customers for each predictive model;

instructions for determining specific layout areas;

instructions for determining where a particular product can be placed in the layout areas; and

instructions for using an optimization model to customize the layout areas for customers, wherein the optimization model used to customize the layout areas is at least one of a transportation model, a network model, or a generalized network model.

11.   The computer program product according to claim 10, wherein the instructions for determining specific layout areas further comprises instructions for determining the maximum and minimum possible sizes for each layout area.

12.   The computer program product according to claim 10, wherein the instructions for

determining specific layout areas further comprises instructions for determining a preference

multiplier for each layout area.

13.   The computer program product according to claim 10, further comprising instructions for

passing the optimization model to a print manager for printing only if the expected profit

exceeds the production cost of the customized layout areas.

17.   The computer program product according to claim 10, wherein the optimization model

used to customize the layout areas is directed at a niche market.

18.   The computer program product according to claim 10, wherein the optimization model

used to customize the layout areas is directed at individual customers.

19.   A system for customizing direct marketing materials, comprising:

means for developing models to predict customer purchases;

means for scoring customers for each predictive model;

means for determining specific layout areas;

means for determining where a particular product can be placed in the layout areas; and

means for using an optimization model to customize the layout areas for customers,

wherein the optimization model used to customize the layout areas is at least one of a

transportation model, a network model, or a generalized network model.

20.   The system according to claim 19, wherein the means for determining specific layout areas further comprises means for determining the maximum and minimum possible sizes for each layout area.

21.   The system according to claim 19, wherein the means for determining specific layout areas further comprises means for determining a preference multiplier for each layout area.

22.   The system according to claim 19, further comprising means for passing the optimization model to a print manager for printing only if the expected profit exceeds the production cost of the customized layout areas.

26.   The system according to claim 19, wherein the optimization model used to customize the layout areas is directed at a niche market.

27.   The system according to claim 19, wherein the optimization model used to customize the layout areas is directed at individual customers.

EVIDENCE APPENDIX

There is no evidence to be presented.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings.